

REMARKS

Applicant is in receipt of the Office Action mailed February 8, 2008. Claims 57 and 60 have been amended. Claim 59 has been cancelled. Claims 1-17, 34-35, 39, 51, 57-58, and 60-68 remain pending in the application. Reconsideration of the present case is earnestly requested in light of the following remarks.

RESTRICTION REQUIREMENT

The Examiner maintains a requirement for election of species under 35 U.S.C. § 121. As mentioned in the Response to Office Action of 5/23/07, Applicant elects the species corresponding to “Embodiment 3 of Figure 3” with traverse from the list of species presented by the Examiner, on the grounds that the Examiner has not issued a proper restriction requirement.

Specifically, the Examiner contends that the claims are directed to “patentably distinct species of the claimed invention” that correspond to “Embodiment 1 of Figure 1,” “Embodiment 2 of Figure 2,” “Embodiment 3 of Figure 3,” and “Embodiment 4 of Figure 4.” *See* Restriction Requirement of 4/25/07 at 2. Applicant respectfully disagrees.

As previously mentioned in the Response of 5/23/07, Applicant notes that claims 1-17, 34-35, 39, 51, and 57-68 correspond to the embodiment shown on Figure 3 (*See* Paragraph [0043]), and dependent claims 18-21, 36-38, 40-50, and 52 correspond to the embodiment shown on Figure 4. *See* Paragraphs [0045]-[0048]. The embodiments shown in Figures 1 and 2 are general in nature, illustrating features of various integrated circuit implementations, which may be employed in the embodiments of Figures 3 and 4. Specifically, the embodiment shown in Figure 1 is a cross-sectional view illustrating how semiconductor devices are grown on a semiconductor wafer and are connected using multiple layers of metals. *See* Paragraph [0026]. The embodiment shown in Figure 2 is a top-view diagram of a packaged integrated circuit illustrating a variety of input/output connections. *See* Paragraph [0039]. Although dependent claims 18-21, 36-38, 40-50, and 52 correspond to the embodiment shown on Figure 4, since these claims are dependent

upon and narrow the scope of independent claims 1 and 34, Applicant believes claims 18-21, 36-38, 40-50, and 52 should not be subject to a restriction.

Furthermore, as the Examiner is certainly aware, according to MPEP 808, “Every requirement to restrict has two aspects: (A) the reasons (as distinguished from the mere statement of conclusion) why each invention as claimed is either independent or distinct from the other(s), and (B) the reasons why there would be a serious burden on the examiner if restriction is not required, i.e., the reasons for insisting upon restriction therebetween as set forth in the following sections.” Furthermore, MPEP 808.01 states:

The particular reasons relied on by the Examiner for holding that the Inventions as claimed are either independent or distinct should be concisely stated. **A mere statement of conclusion is inadequate.** The reasons upon which the conclusion is based should be given.

Thus in this case, the Office Action asserts that Applicant’s claims correspond to distinct species without giving particular reasons why each invention is either independent or distinct from the others (i.e., why are they distinct species) and without giving reasons how it would be a serious burden on the Examiner if the restriction was not required as required by MPEP 808. Instead, the Office Action only lists the four Figures of the Specification without giving any reasons why the alleged embodiments corresponding to the Figures are independent from each other or distinct. Applicant notes that the Examiner has not provided specific reasons why the four claim groupings are independent (i.e., that “there is no disclosed relationship between the two or more inventions claimed”) or distinct (i.e., that the inventions “are not connected in at least one of design, operation, or effect...and wherein at least one invention is PATENTABLE OVER THE OTHER”) as described in MPEP 802.01.

Applicant cannot find any reasons for the restriction besides conclusory remarks. For example, the Restriction Requirement of 4/25/07 merely lists the alleged patentably distinct species without characterizing or giving any description. *See* Office Action of 4/25/07 at p. 2. Similarly, the latest Office Action merely states that:

This is not found persuasive because there is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (e.g., searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one

species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 USC 101 and/or 35 USC 112, first paragraph.

See Office Action at 2

Applicant notes that no reasons for the restriction are given for either independence or distinctness. The Office Action provides no such reasoning to this effect, and only gives conclusory statements without any support or reasoning.

Finally, as stated above, the Office Action must provide reasons why there would be a “serious burden on the Examiner if restriction is not required” as required by MPEP § 808. In regard to this requirement, the Examiner provides no such evidence, as argued above. Since the Examiner has failed to establish either one of the two requirements for a proper restriction requirement, “the reasons (as distinguished from the mere statement of conclusion) why each invention as claimed is either independent or distinct from the other(s),” and a “serious burden on the examiner if restriction is not required,” Applicant submits that the Examiner has not established all of the necessary elements of a *prima facie* restriction requirement as required by MPEP § 808. For at least the reasons above, Applicant respectfully submits that the Restriction is **improper** and hereby requests removal thereof.

Applicant further submits that the withdrawn claims should be considered allowable upon allowance of a base claim, e.g., claim 1.

103 REJECTIONS

Claims 1-17, 34-35, 39-51, 57-58, and 61-62 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yao (U.S. Patent No. 5,838,204) in view of Nakamura (U.S. Patent No. 6,476,505). Since independent claim 57 has been amended to include allowable subject matter, this leaves claims 1-17, 34-35, and 39-51 subject to the 103(a) rejection. Applicant respectfully disagrees for at least the following reasons.

Claim 1

In asserting that Nakamura teaches the element of claim 1 of “wherein the I/O pad of the first type is narrower than the power supply I/O pad in order to make room for the strip,” the Office Action cites Figures 1-3 and 6-15 of Nakamura. *See* Office Action at 3. However, Applicant notes that even with a proper combination of Yao and Nakamura, which with Applicant disagrees, the combination would still not produce claim 1. Specifically, neither Yao nor Nakamura teach that “the strip is connected to a second point on the integrated circuit” as required by claim 1. Applicant respectfully submits that this element is not “inherently connect[ed] to the circuit,” as asserted by the Office Action. *See* Office Action at 3. Applicant fails to see where Yao or Nakamura, taken singly, or in combination, teach or suggest a strip, much less a strip that “strip is connected to a second point on the integrated circuit” of claim 1.

Furthermore, Applicant submits that the alleged strip of Nakamura, cited as element “4” (*see* Office Action at 3) is simply an “electrical wire” that connects “electric pads 2” “to the integrated circuit,” and are not a “strip” as required by claim 1. *See* Nakamura at 3:11-23.

Applicant respectfully notes that the Application describes that, in some embodiments, it “allocates stripes 312a and 314a from the data contacts for parallel connections to power buses 304 and 308a respectively.” *See* Application at [034] lines 23-25. Applicant notes that in contrast, the cited element 606 of Yao merely describes “multiple bond pads,” which are merely I/O pads for the IC, as defined by Yao as “V_{DD} pads, V_{SS} pads, and input/output pads.” *See* Yao at 7:61-67. Thus nowhere does Yao teach or suggest the “strip” element of claim 1. Since neither Yao nor Nakamura, taken singly or together, teach or suggest the “strip” element of claim 1, they also do not teach

that the strip “of deposited conductor is connected to a second point on the integrated circuit” as also required by claim 1.

Furthermore, Applicant notes that no proper motivation to combine Yao with Nakamura has been provided by the Office Action except for a general claim of obviousness. *See* Office Action at 3. Appellant thus notes that there is no proper showing of a suggestion, teaching, or motivation to combine prior art teachings, which “must be clear and particular... broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence’.” *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The Office Action does not provide any analysis or reasons for obviousness under the KSR standard either. *KSR Int’l v. Teleflex, Inc.*, 550 U.S. ____ (2007). Thus, the combination is not available for making a prima facie case of obviousness. Furthermore, even if the references were combinable, which Appellant argues they are not, the resulting combination would still not produce Appellant’s invention as claimed, as argued above.

For at least the above reasons, Yao and Nakamura do not teach or suggest each and every element of claim 1 as required for an obviousness rejection. Thus claim 1 and its dependent claims are patentably distinct and non-obvious, and are thus allowable.

Claim 34

With regard to claim 34, neither Yao nor Nakamura, taken singly or together, teach the elements of “a first strip of deposited conductor located alongside the I/O pad, wherein the first strip is connected to multiple points on the positive power bus” and “a second strip of deposited conductor located alongside the I/O pad, wherein the second strip is connected to multiple points on the negative power bus” of claim 34. Similar arguments as given above with regard to claim 1 apply to these elements that are simply not taught or suggested by the cited prior art.

In asserting that Nakamura teaches the element of claim 34 of “wherein the I/O pad of the first type is narrower than the power supply I/O pad in order to make room for the first and second strips, respectively,” the Office Action cites Figures 1-3 and 6-15 of Nakamura. *See* Office Action at 6-7. However, Applicant notes that even with a proper combination of Yao and Namakura, which Applicant disagrees with, the combination would still not produce claim 1. Specifically, neither Yao nor Nakamura teach that “a first strip of deposited conductor located alongside the I/O pad, wherein the first strip is connected to multiple points on the positive power bus” as required by claim 34. Applicant respectfully submits that this element is not “inherently connect[ed] to the circuit,” as asserted by the Office Action. *See* Office Action at 6. Applicant submits that Yao or Nakamura, taken singly, or in combination, do not teach or suggest a strip, much less a strip that “is connected to multiple points on the positive power bus” of claim 34.

Furthermore, Applicant submits that the alleged strip of Nakamura, cited as element “4” (*see* Office Action at 7) is simply an “electrical wire” that connects “electric pads 2” “to the integrated circuit,” and are not a “strip” as required by claim 34. *See* Nakamura at 3:11-23.

Applicant respectfully notes that the Application describes that, in some embodiments, it “allocates stripes 312a and 314a from the data contacts for parallel connections to power buses 304 and 308a respectively.” *See* Application at [034] lines 23-25. Applicant notes that in contrast, cited element 606 of Yao merely describes “multiple bond pads,” which are merely I/O pads for the IC, as defined by Yao as “V_{DD} pads, V_{SS} pads, and input/output pads.” *See* Yao at 7:61-67. Furthermore, Applicant notes that the cited element 608 of Yao merely describes “a separate power bus ring structure 608.” *See* Yao at 7:64. However, Yao does not teach or suggest a “first strip” that “is connected to multiple points on the positive power bus” of claim 1.

Thus nowhere does Yao teach or suggest the “strip” element of claim 34. Since neither Yao nor Nakamura, taken singly or together, teach or suggest the “strip” element of claim 1, they also do not teach that the strip “is connected to multiple points on the positive power bus” and “a second strip” that “is connected to multiple points on the negative power bus” of claim 34.

Furthermore, Applicant notes that no proper motivation to combine Yao with Nakamura has been provided by the Office Action except for a general claim of obviousness. *See* Office Action at 7. Appellant thus notes that there is no proper showing of a suggestion, teaching, or motivation to combine prior art teachings, which “must be clear and particular... broad conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence’.” *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The Office Action does not provide any analysis or reasons for obviousness under the KSR standard either. *KSR Int’l v. Teleflex, Inc.*, 550 U.S. ____ (2007). Thus, the combination is not available for making a prima facie case of obviousness. Furthermore, even if the references were combinable, which Appellant argues they are not, the resulting combination would still not produce Appellant’s invention as claimed, as argued above.

For at least the above reasons, Yao and Nakamura do not teach or suggest each and every element of claim 34 as required for an obviousness rejection. Thus claim 34 and its dependent claims are patentably distinct and non-obvious, and are thus allowable.

Removal of the U.S.C. 103(e) rejection of claims 1-17, 34-35, and 39-51 is therefore requested.

Applicant also asserts that numerous ones of the dependent claims recite further distinctions over the prior art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

ALLOWED CLAIMS

Applicant would like to thank Examiner for allowing claims 63-68.

Furthermore, Applicant would like to thank Examiner for indicating that the matter of claims 59 and 60 would be allowed if re-written in independent form. Applicant has decided to accept the allowed subject matter of claim 59, but reserves the right to pursue the original claimed subject matter in a subsequent continuation application.

Accordingly, as indicated above, Applicant has amended independent claim 57 to include the allowed subject matter of claim 59, now cancelled. Thus claim 59 and its dependent claims are now in condition for allowance.

Therefore removal of the section §103 rejection of claims 57-58 and 61-62 is respectfully requested.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

Also filed herewith are the following items:

- ☐ Request for Continued Examination
- ☐ Terminal Disclaimer
- ☐ Power of Attorney By Assignee and Revocation of Previous Powers
- ☐ Notice of Change of Address
- ☐ Other:

Respectfully submitted,
/James W. Huffman/

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Date: _____5/7/08_____